

Serial No. 09/808,376

IN THE CLAIMS

1 1. (Canceled)

1 2. (Currently amended) A method for use in wireless equipment, the method
2 comprising the steps of:

3 receiving a signal,

4 processing the received signal to generate a Yamamoto-Itoh (YI) metric,

5 determining a Bit-Error-Rate (BER) estimate for the received signal as a function
6 of the YI metric,

7 ~~The method of claim 1~~ wherein the ~~providing~~ determining step further comprises
8 the steps of:

9 retrieving, from at least one look-up table stored in a memory, a value ~~values~~ for
10 a compensation factor as a function of a value of the generated YI metric; and

11 modifying the initial *BER* estimate value with the retrieved compensation factor
12 value to ~~provide~~ determine the *BER* estimate.

1 3. (Currently amended) A method for use in wireless equipment, the method
2 comprising the steps of:

3 processing a received signal to ~~provide~~ generate at least one Yamamoto-Itoh (YI)
4 metric value over a time period;

5 selecting a compensation factor value as a function of the ~~provided~~ generated YI
6 metric value;

7 selecting an initial *BER* estimate value as a function of the ~~provided~~ generated YI
8 metric value; and

9 determining ~~providing~~ a Bit-Error-Rate (BER) estimate for the received signal as
10 a function of the initial *BER* estimate value and the selected compensation factor value.

1 4. (Currently amended) The method of claim 3 wherein the ~~providing~~
2 determining step further includes the step of multiplying the selected compensation
3 factor value ~~with~~ by the initial *BER* estimate value to ~~provide~~ determine the *BER*
4 estimate.

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1 5. (Currently amended) A method for use in wireless equipment, the method
2 comprising the steps of:

3 processing a received signal to ~~provide~~ determine an initial *BER* estimate value
4 for the received signal;

5 modifying the initial *BER* estimate value for the received signal with a
6 compensation factor value to provide a Bit-Error-Rate (*BER*) estimate for the received
7 signal, wherein the compensation factor value is determined as a function of at least
8 one Yamamoto-Itoh (*YI*) metric value.

1 6. (Canceled)

1 7. (Currently amended) Apparatus for use in wireless equipment, the
2 apparatus comprising:

3 a convolutional decoder for processing a received signal for use in determining at
4 least one Yamamoto-Itoh (*YI*) metric value,

5 a processor for determining a Bit-Error-Rate (*BER*) estimate for the received
6 signal as a function of the at least one *YI* metric value,

7 ~~The apparatus of claim 6~~ wherein the processor (a) retrieves, from at least one
8 look-up table stored in a memory, a compensation factor value as a function of the at
9 least one *YI* metric value, and (b) modifies the initial *BER* estimate value with the
10 retrieved compensation factor value to ~~provide~~ determine the *BER* estimate.

1 8. (Currently amended) Apparatus for use in wireless equipment, the
2 apparatus comprising:

3 a convolutional decoder for processing a received signal for use in determining at
4 least one Yamamoto-Itoh (*YI*) metric value,

5 a processor for providing a Bit-Error-Rate (*BER*) estimate for the received signal
6 as a function of the at least one *YI* metric value,

7 ~~The apparatus of claim 6~~ wherein the processor (a) determines a compensation
8 factor value as a function of the at least one *YI* metric value, (b) determines an initial
9 *BER* estimate value as a function of the at least one *YI* metric value, and (c) ~~provides~~
10 determines the *BER* estimate for the received signal as a function of the initial *BER*

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11 estimate value and the selected compensation factor value.

1 9. (Currently amended) The apparatus of claim 8 wherein the processor
2 multiplies the selected compensation factor value with by the initial *BER* estimate value
3 to provide determine the *BER* estimate.

1 10. (Currently amended) A wireless receiver comprising:
2 a processor; and
3 a memory for storing a look-up table;
4 wherein the processor uses a Yamamoto-Itoh (YI) metric value as in an index
5 into the look-up table to retrieve an associated Bit-Error-Rate (BER) for a received
6 signal.

1 11. (Currently amended) A wireless receiver comprising:
2 a memory for storing a look-up table such that an index into the look-up table is a
3 Yamamoto-Itoh (YI) metric value for retrieving an initial Bit-Error-Rate (BER) estimate
4 stored therein; and
5 a processor for modifying the initial BER value with a scale factor to provide
6 determine a Bit-Error-Rate (BER) estimate for a received signal.

1 12. (New) A method for use in wireless equipment, the method comprising the
2 steps of:
3 processing a received signal to generate a Yamamoto-Itoh (YI) metric,
4 determining an initial Bit-Error-Rate (BER) estimate value for the received signal
5 as a function of the YI metric,
6 selecting, as a function of the generated YI metric, a value for a compensation
7 factor; and
8 modifying the initial *BER* estimate value with said compensation factor value to
9 determine the *BER* estimate.